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(54) Name of the Invention: Measuring Cup

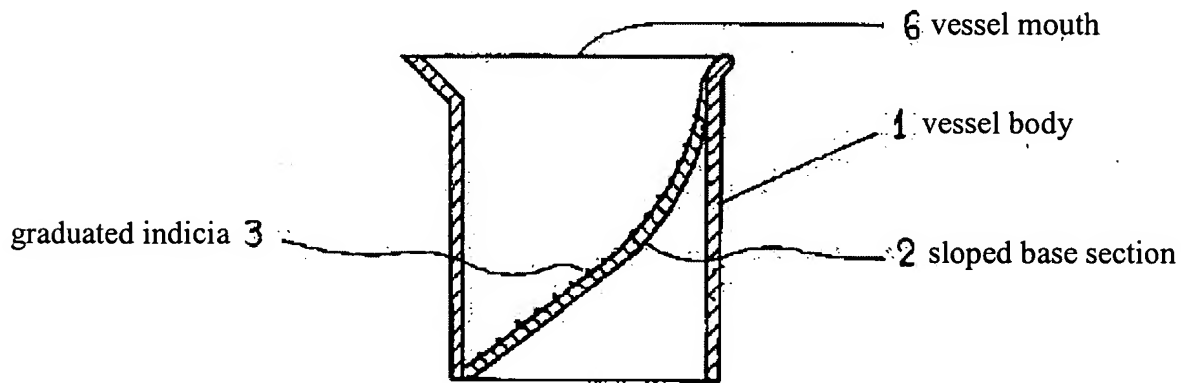
(57) Summary:
(Problem)

To eliminate problems experienced when attempting to pour a liquid into a measuring cup in order to measure the liquid's volume. If one focuses one's attention on the cup's graduation

markings, liquid can be mistakenly spilled outside the vessel, but if one focuses on the location into which one is pouring, it is easy to overfill the cup beyond the intended graduation marking.

(Means for Solution)

The base of a vessel body 1 can be sloped to form a sloped base section 2 – or a protruding base section 4 that protrudes upward from the bottom of the vessel can be provided – graduated indicia 3 being marked on the sloped surfaces thereof. The vessel may also comprise a shaft 8 extending upward from the upper point of the protruding base section 4 toward a vessel mouth 6, or the protruding base section 4 may be formed so as to be detachable from the vessel base, as an independent protruding body 5.



Scope of the Claims

Claim 1

A measuring cup comprising a main vessel body (1), the base of which is sloped, forming a sloped base section (2) onto which graduated indicia (3) are marked.

Claim 2

A measuring cup comprising a main vessel body (1), from the base of which, extending upward and inward, is a protruding base section (4) that is shaped in a form such as a cone, a trapezoid, or a shaft form cut on a slant, at least one sloped surface of which is marked with graduated indicia (3).

Claim 3

A measuring cup as recited in Claim 2, wherein a shaft (8) extends upward toward a vessel mouth (6) from the top of the protruding base section (4).

Claim 4

A measuring cup as recited in either Claim 1 or Claim 3, wherein an independent protruding body (5) is formed by allowing either the sloped base section (2) or the protruding base section (4) to be detachable from the main vessel base such that the independent protruding body (5) may be repeatedly affixed to and removed from the vessel body.

Detailed Description of the Invention

(0001)

Technical Field of the Invention

The current invention relates to a measuring cup, the graduated indicia of which have been made easier to read, and which has been made easier to use for measurement.

(0002)

Related Art

The graduated indicia on conventional measuring cups are located on the transparent side walls of the vessel body. This arrangement required that the progress of the level of the liquid being poured into the measuring cup, and the graduated indicia on its walls, both be viewed from outside and adjacent to the vessel body.

(0003)

Problem to be Solved by the Invention

With traditional measuring cups, the necessity of looking by turns at the graduated indicia and the mouth of the vessel into which liquid was being poured while measurement was being carried out made it easy to fill the vessel beyond the intended level, or to spill liquid outside the vessel, requiring re-measurement. The necessity of maintaining the vessel in a level state while also bringing one's head close to the side of the vessel in order to view the graduated indicia also posed a problem of handling and posture for the person carrying out the measurement.

(0004)

Means for Solving the Problem

The current invention allows a user to verify the position into which a liquid is being poured through the mouth (6) of a vessel body (1), while at the same time viewing and using the vessel's graduated indicia (3). This is achieved through the use of a main vessel body (1), the base of which has been made to slope upward into a sloped base section (2) or a protruding base section (4), the sloped surfaces thereof being marked with graduated indicia (3). A shaft (8) extending upward toward the vessel opening (6) and marked with graduated indicia can also be attached to the top portion of the protruding base section (4). By placing the graduated indicia (3) on the sloped base section (2), the protruding base section (4), or the upward extending shaft (8), the current invention eliminates the problems of overfilling and erroneously poured liquids that were common when using traditional measuring vessels that required the user to observe the vessel's graduated indicia from a point outside the vessel while at the same time watching the now physically removed flow of liquid into the mouth of the vessel. In this way, the current invention permits a much smoother process of pouring and measuring.

(0005)

Preferred Embodiment(s) of the Invention

One possible embodiment of the current invention, illustrated by Fig. 1, is a vessel body (1) in which the base has been made to slope upward into a sloped base section (2), onto which have been placed graduated indicia (3). The sloped base section (2) can be conceived in a range of forms, including a form that is generally convex or concave, multi-faceted, or stepped. A version of sloped base section (2) that has been rendered detachable is also possible. With the

above-mentioned measuring cup, liquid is poured into the vessel mouth (6) and runs down the sloped base section (2) until it reaches the bottom of the sloped section, at which point the liquid begins to pool up, causing the surface of the liquid to gradually progress from lower graduated indicia (3) toward higher graduated indicia (3). This upward progression of the liquid's surface can be viewed, and the graduated indicia (2) read, from the mouth (6) of the vessel. *[[translator's note: the mistaken use of reference number (2) in this sentence is carried over from the original]]* What is more, because the flow of the liquid being poured into the vessel meets with a sloped surface, the liquid runs smoothly downward without splashing back or creating waves, making the location being poured into, the level of the liquid, and the graduated indicia (3) easy to discern from the mouth (6) of the vessel, the result being a measuring operation that is both easy and accurate, and that eliminates the need for re-measurement. At the bottom of the vessel body (1), the volume of liquid represented by a single step in the measurement graduations (3) is extremely small, so very small volumes may be measured.

(0006) Another possible embodiment of the current invention, illustrated by Fig. 2, is a vessel body (1) in which a protruding base section (4) protrudes conically upward and inward from the bottom of the vessel, graduated indicia (3) being marked on the conical face of this protruding base section (4). In addition to a generally conical form such as a pyramid or a cone, the protruding base section (4) that extends upward toward the vessel's mouth (6) can also be conceived in other shapes, such as a trapezoid, or a shaft cut to a sloped form, and any of the above can be imagined with concave or convex faces, or with integral steps. The peak or uppermost point on the protruding base section (4) can be envisioned formed with a recessed area (7), this recess being used for the measurement of very small volumes of liquid. A cylindrical or flat shaft (8) extending upward toward the vessel mouth (6) from the top of the protruding base section (4) is also possible. This shaft (8) can also be envisioned in a tubular form, and a sub-base cavity (9) can be formed beneath the raised protruding base section (4), as illustrated in Fig. 3, such that when a passage is opened from the top of the shaft (8) down into the sub-base cavity (9), the entire resulting unit can be removed and turned upside down for independent use as a funnel.

(0007) As illustrated in Fig. 4, the sloped base section (2) or the protruding base section (4) that extends upward from the base of the vessel can also be envisioned detachably linked to the base of the vessel body (1) in order to permit repeated removal and replacement of an independent protruding body (5). In order to allow the independent protruding body (5) to be removed from and affixed to the vessel body with ease, the shaft (8) that extends upward from the protruding base section (4) can be used as a graspable shaft, which can also be marked with graduated indicia (3). In addition to graduated indicia (3) being marked on the sloped base section (2) or the protruding base section (4) of the vessel, they may also be marked on the exterior wall of the main vessel body (1), as is found with traditional measuring cups. Such an arrangement will permit measurements to be carried out with reference to either the inside or outside of the vessel.

(0008)

Effect of the Invention

A measuring cup following the current invention allows the location into which liquid is being poured through the vessel mouth (6), and the graduation indicia (3), to be viewed simultaneously; also, waves will not be produced in the surface of the liquid being poured into the vessel, making discernment of the level of the liquid and the graduation indicia easier, thereby eliminating problems of mis-measurement and spilled liquids. Extremely small quantities of

liquid can also be measured near the bottom of the vessel, or in the recessed area (7) of the protruding base section (4). Of course, in addition to liquids, other materials such as particulate or granular solids may also be measured.

Brief Description of the Drawings

Fig. 1 is a side view of the measuring cup with a sloped base section

Fig. 2 is a side view of the measuring cup with a protruding base section

Fig. 3 is a side view of the measuring cup with a tubular shaft extending from a protruding base section

Fig. 4 is an oblique perspective view showing the independent protruding body

Explanation of the Reference Symbols

- 1 vessel body
- 2 sloped base section
- 3 graduation indicia
- 4 protruding base section
- 5 independent protruding body
- 6 vessel mouth
- 7 recessed area
- 8 shaft
- 9 sub-base cavity

